AMENDMENT TO THE CLAIMS

(original)

1. A method of signal transmission comprising the steps of:

splitting a signal s_1 into signals $s_1(a)$ and $s_1(b)$, wherein the signal s_1 is split unevenly such that the signal $s_1(a)$ has an associated power level greater than a power level associated with the signal $s_1(b)$;

phase sweeping the signal $s_1(a)$ using a first phase sweep frequency signal to produce a phase swept signal $s_1(a)$; and

phase sweeping the signal $s_1(b)$ using a second phase sweep frequency signal to produce a phase swept signal $s_1(b)$, wherein the phase swept signal $s_1(a)$ has a different phase from the phase swept signal $s_1(b)$.

(original)

2. The method of claim 1, wherein the first phase sweep frequency signal phase sweeps the signal $s_1(a)$ in a direction opposite to a direction the second phase sweep frequency signal phase sweeps the signal $s_1(b)$.

(original)

3. The method of claim 2, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

(original)

4. The method of claim 2, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is not identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

(original)

5. The method of claim 2, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is a fixed phase shifting rate.

(original)

6. The method of claim 2, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is a variable phase shifting rate.

(original)

7. The method of claim 2, wherein a second phase sweep frequency associated with the second phase sweep frequency signal is a fixed phase shifting rate.

(original)

8. The method of claim 2, wherein a second phase sweep frequency associated with the second phase sweep frequency signal is a variable phase shifting rate.

(original)

9. The method of claim 1, wherein the first and second phase sweep frequency signals phase sweep the signals $s_1(a)$ and $s_1(b)$ in a same direction.

(original)

10. The method of claim 9, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

(original)

11. The method of claim 9, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is not identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

(original)

12. The method of claim 1 comprising the additional step of:

amplifying the phase swept signals $s_1(a)$ and $s_1(b)$.

(original)

13. The method of claim 1 comprising the additional step of:

transmitting the phase swept signals $s_1(a)$ and $s_1(b)$ over a pair of diversity antennas.

Claim 14 canceled.

(currently amended)

15. A method of signal transmission comprising the steps of ~~The method of claim 14, wherein~~:

splitting a signal s_1 into signals $s_1(a)$ and $s_1(b)$, wherein the signal s_1 includes a communication signal;

phase sweeping the signal $s_1(a)$ using a first phase sweep frequency signal to produce a phase swept signal $s_1(a)$; and

phase sweeping the signal $s_1(b)$ using a second phase sweep frequency signal to produce a phase swept signal $s_1(b)$, wherein the phase swept signal $s_1(a)$ has a different phase from the phase swept signal $s_1(b)$, and the first phase sweep frequency signal phase sweeps the signal $s_1(a)$ in a direction opposite to a direction the second phase sweep frequency signal phase sweeps the signal $s_1(b)$.

(original)

16. The method of claim 15, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

(original)

17. The method of claim 15, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is not identical to a second phase sweep frequency associated with the second phase sweep frequency signal.

(original)

18. The method of claim 15, wherein a first phase sweep frequency associated with the first phase sweep frequency signal is a fixed or a variable phase shifting rate.

(original)

19. The method of claim 15, wherein a second phase sweep frequency associated with the second phase sweep frequency signal is a fixed or variable phase shifting rate.

Claims 20-22 canceled.

(currently amended)

23. The method of claim ~~14~~ 15 comprising the additional step of:

amplifying the phase swept signals $s_1(a)$ and $s_1(b)$.